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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/674,884

09/29/2003

Alexey Kryuchkov

IGT1P085/P-557 CIP

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EXAMINER

RENDON, CHRISTIAN E

ART UNIT

PAPER NUMBER

3714

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DELIVERY MODE

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/674,884

Applicant(s)

KRYUCHKOV ET AL.

Examiner

Christian E. Rendón

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 29 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date 06/29/04 CER  
06-10-04
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.

1. Claim 59 recites the limitation "a first surface" in line 25. There is insufficient antecedent basis for this limitation in the claim since the claims that 59 depend on never disclose "a first surface."

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

**Claims 1-24, 26, 28-39 are rejected under 35 U.S.C. 102(a) as being anticipated by Letovsky (US 6,811,482 B2) as evidence by Game Spot Staff ("15 Most Influential Games of All Time").**

1. Regarding claim 1-9, Letovsky discloses a gaming apparatus with enough processing power to execute a software engine that is capable of generating a three dimensional (3D) virtual world (col. 3, line 61). The disclosed apparatus is configured to work with a 3D engine: Truevision, Quake, etc (col. 3, lines 63-64) that is able to create 3D character models within a 3D world (Game Spot Staff: pg 16, par 2, line 1-4). The apparatus is used to randomly create various images (col. 4, lines 25-26), within a 3D world or environment (Fig. 2) that move along a trajectory indication line (col. 4, line 18), a linear path or a random motion path (col. 4, lines 21-22). The player then uses the controller: joystick, trackball, touch screen (col. 4, lines 53-54) to move a cursor and target a selected image (col. 4, lines 66-67) or index from a series of cycled images (col. 5, lines 6-7). Once

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the trigger button is pressed the collision detection path (col. 5, line 1) determines a hit and then renders the image into the selection grid (col. 5, lines 15-16) as a two dimensional object. The grid or the virtual slot reels (col. 5, lines 7-8) can hold nine selected images or indexes (Fig. 2, 3). The appropriate number and placement of the selected images will determine a win as defined by the pay table (col. 5, lines 17-19).

2. Regarding claim 10, Letovsky discloses the apparatus providing a means for allowing multi-player slot gaming. Therefore "player 1" and "player 2" have their own game of chance that maps a set of symbols that are 3D objects in a 3D world.

3. Regarding claim 11-15, the system randomly determines a motion or target trajectory line that the image will follow within the 3D gaming environment (col. 4, 20-22), therefore the game is able to produce parallel and crossing paths. The images are also able to travel in a random motion path (col. 4, line 22) or a non-linear path in the gaming environment. The apparatus applies a level of realism (col. 1, lines 64-65) through the use of the 3D engine, therefore when the 3D virtual environment is outer space the realistic motion of an image is a curve line as described by the Einstein field equations for the curvature of space-time.

4. Regarding claims 16-17, Letovsky discloses that the 3D engine renders the images or objects from the image banks on to the display (col. 7, lines 36-37). There are many different techniques for rendering an image, polygon-based rendering uses small 2D polygons: rectangle, cylinder, etc attached to a wire frame to create a 3D image.

5. Regarding claims 18 and 20-23, Letovsky discloses a set of secondary images that are displayed as a series of cycled images in a manner representative of a typical slot machine (col. 5, lines 5-8). Therefore the series of images would start to repeat themselves after the last image by displaying the first image again like the reels in a slot machine. The series of images is a portion of possible images that reside in the image library (col. 4, lines 23-25). The software allows for the

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casino to configure the number of displayed images (col. 4, lines 39-42) therefore the portion of displayed images remains constant throughout a game.

6. Regarding claim 19, 24 and 26, the images that a player has successfully targeted into the grid are a subset of the total number of possible images. The Office considers the images randomly selected since each player will decide differently which images to select. The apparatus will render all of the images between the first index and the selected image since the images are cycled through a series (col. 5, lines 6-7).

7. Regarding claim 28-35 and 38, the apparatus contains a human interface device: joystick, trackball, touch screen (col. 4, lines 53-54) that accepts several input signals. The player can move a cursor and target a selected image (col. 4, lines 66-67) or index. The collision detection path algorithm (col. 5, line 1) determines if an image and the cursor have properly collided. The image will stop its previous motion (Fig 2, 36) and then alter its motion (Fig. 2, 39) in order to go towards the grid (col. 5, lines 12-14). Therefore the first motion (Fig. 2, 39) begins from the corners of the 3D world (Fig. 2) or at the first object source and then a second motion (Fig. 2, 39) is applied to an image that begins from a different position from the first object source, in other words it starts from the last position of image with the first motion (Fig. 2, 36). The apparatus also includes a coin sensor (Fig. 1, 31) and a button (Fig. 1, 22) that generate input signals for initiating a game.

8. Regarding claims 36-37 and 54-59, the grid or the virtual slot reels (col. 5, lines 7-8) divides the 3D surface into two segments: an active area and a game outcome area. The grid can hold nine selected images or indexes (Fig. 2, 3). The appropriate number and placement of the selected images will determine a win or a payline as defined by the pay table (col. 5, lines 17-19). As disclosed by claim 12 of the prior art, the revealed game can be incorporated into another existing game as a bonus game (col. 6, lines 17-19). The images that are placed in the grid vary with time since they are randomly picked. A player is allowed to interact with the active area through a

joystick or touch screen (col. 4, lines 52-54), which generates input signals that can alter the movement of an image (Fig. 2: 36, 39).

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

**Claims 39-48, 50, 61, 64-66, 75-83 and 86-88 are rejected under 35 U.S.C. 102(e) as being anticipated by Ellis (WO 02/32521 A1).**

9. Regarding claims 75-77, 82-83 and 86-88, a slot machine is comprised of a housing, a human interface, credit acceptor, a reward provider, and memory. Ellis discloses an electronic game for slot machines that displays 2D virtual reels that are spun as a 3D reel (Abstract & Fig. 2).

"This gives the impression to the player that the symbols are in space and out of the two-dimensional plane of the display on which the symbols are presented" (pg. 2, par 2, lines 3-5). In other words, the game is displayed a 3D environment and when the reels are in the stop position the images are rendered into 2D images (Fig. 2, 11). Furthermore the player is given the sense of motion in a 3D environment by the reels that are moving in a straight line (Fig. 2).

10. Regarding claims 61 and 78-81, the game machine is able to display a plurality of rows and columns that combine into different shapes or geometries: square, rectangles, triangles (pg. 2, par. 3, lines 4-7), which all contain a flat strip. Images like symbols, letters, icons, numbers are rendered into the rows or sections of the reels. The reels spin as a function of time and at the

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conclusion of the spin the combination is compared to a pay table to determine a win (pg. 3, par. 2, lines 18-21). Therefore the reels are displaying a sequence of symbols.

11. Regarding claims 39-44, Ellis discloses virtual reel strips that are rendered in a 3D environment when spun and rendered in 2D when presenting the game outcome, which is constant. The reels as a whole create a rectangular surface containing three (Fig. 2) or five (Fig. 1) columns, which can be reel strips since Ellis discloses horizontal movement of columns (Fig. 3). Furthermore, Ellis states, "any number of combined rows and columns can be employed with the only limitation being the size of the screen display" (pg. 7, par. 6, lines 1-4).

12. Regarding claims 45-48, 50 and 64-66, Ellis discloses a game where the reels move linearly in a vertical motion (Fig. 2) and when the player deems it necessary (pg. 3, par. 1, lines 3-5) the reels move linearly in a horizontal motion (Fig. 3). Before either one of these motions commences a first subset of symbols is rendered on a flat surface. Once the movement begins a segment covers the distance equal to a segment in order to display a segment completely and clearly (Fig. 2). The motion reveals the beginning of a second subset of symbols as the first subset of symbols begins to leave the screen (Fig. 2). The direction of the movement: horizontal or vertical varies over time since a player can decide when to spin in the other direction (pg. 3, par. 1, lines 3-5). Once the game displays the final results, the player has the option of playing another game from the previous final state.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claims 49, 51-53, 67-68, 70 and 72-74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (WO 02/32521 A1) in view of Gauselmann (US 2004/0048657 A1).**

13. The above description of the invention disclosed by Ellis and the limitations they pertain is considered within this art rejection as well. The rendered 2D images are used as part of the game outcome presentation (pg. 3, par. 2, lines 18-21). Ellis discloses a game where a player can decide to spin the reels horizontally (Fig. 3) after spins the reels vertically (Fig. 2 & pg. 3, par. 1, lines 3-5). However remains silent about allowing a player or casino operator to configure the number of reel segments and the number of different symbols.

14. Gauselmann discloses a game machine that allows a player or casino operator to configure the spinning time or speed of the reels (Abstract). The arrangement of the symbols or the number of different type of symbols on the reels is also configurable (Abstract) allowing a player or casino operator to create their own reel strips (par. 34, lines 17-18). In terms of configuring the paylines, the player is allowed to designate the number of paylines that run across an array of reel symbols (par. 35, lines 2-3) and even create unconventional paylines or paths (par. 36, lines 4-5), therefore defining the number of visible reel segments and the starting location of a payline. By defining the number of reels in a game (Abstract), the player or casino operator is able to determine the total number of segments in the reel model.

15. One of ordinary skill would have combined the art teachings of Gauselmann with Ellis in order to support the limitations that were disclosed by Ellis. As well as include extra features that will make the experience even more interactive by providing a wide variety of options (Ellis: pg. 2, par. 1, lines 1-4).

16. Regarding claims 52-53 and 74, Ellis discloses a game where the reels move vertically (Fig. 2) and another that has horizontally moving reels (Fig. 3). However remains silent about other reel movements: cock-up/down or a small motion prior to the spinning, bounce-up/down or oscillating,



as well as configuring these movements and a stop position. The art combination of Ellis and Gauselmann supports the customization of all the game's features therefore these other movements and a stop position would have been support if these features were disclosed as well. However the limitation of these movements and a stop position carry no patentable weight since no stated problem is solved or unexpected result obtained by including these features. Therefore the Office views these claim limitations as mere design choice.

**Claim 71 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (WO 02/32521 A1) in view of Gauselmann (US 2004/0048657 A1) and in further view of Gauselmann (US 2004/0266515 A1).**

17. The above description of the invention created by the art combination of Ellis and Gauselmann & the limitations they pertain is considered within this art rejection as well. However the art combination is silent about allowing a player to interact with the reels by having touchable reel segments.

18. Gauselmann discloses in a different invention a feature that allows a player to select a reel or symbol by touching it (par. 39, lines 7-9). One of ordinary skill would include this touch feature into the art combination to further increase the appeal of the game machine (Ellis: pg. 1, par. 2, lines 6-7). The ability to select the number of touchable segments is a feature that is available in the limitations of the art combination since a player is allowed to create their own reels.

**Claim 60 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (WO 02/32521 A1) in view of Abbott (US 7,179,166 B1).**

19. Ellis discloses providing a player the option of further spinning the reels by inputting a spin command (pg. 3, par. 1, lines 3-5). Therefore the action of not sending the command is viewed as

the player's desire to stop spinning the reels. However, Ellis is silent about providing a dedicated stop button to end a game.

20. Abbott discloses a stop button that ends the rotation of the reels (Abstract). It would have been obvious for one of ordinary skill to have incorporated a stop feature as disclosed by Abbott into Ellis since the game disclosed by Ellis already teaches giving the player a means to inform the game to stop spinning the reels.

**Claims 63, 84-85 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (WO 02/32521 A1) in view of Gauselmann (US 2004/0092302 A1).**

21. Ellis discloses a game screen that displays a game and a human interface section containing a spin button (Fig. 2). The game is responsive to a spin command causing at least one row to appear in 3D and spin (pg. 3, par. 5, lines 1-3). However, Ellis is silent about the structure of the human interface that will activate the functionality of the spin button.

22. Gauselmann discloses a game machine with several input devices: a keypad (par. 18), a touch screen, and a joystick (par. 19, lines 7-9). As well discloses that other input devices are also suitable (par. 19, line 9) for moving a cursor with a mouse and trackball or to have a microphone to allow for voice commands. Which are forms of inputs that are well known in the art of computers and slot machines therefore this art combination is made further stress the obviousness of these claim limitations.

**Claims 25 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Letovsky (US 6,811,482 B2) as evidence by Game Spot Staff ("15 Most Influential Games of All Time") in view of one of ordinary skill in the art.**

23. Letovsky reveals his intentions of creating a casino game that incorporates game elements from current video games like 1<sup>st</sup> person shooter in order to appeal to a larger audience (col. 2, lines 43-48). However is silent about a previous game influencing the current game. Even though Letovsky discloses an interest of incorporating the game into another game as a 2<sup>nd</sup> level or a 2<sup>nd</sup> game (col. 6, lines 17-19). It is well known in the art of video games like 1<sup>st</sup> person shooters that a current level is influenced through many game-dependent factors that occur in previous levels called progressive leveling. Therefore it would have been obvious of one of ordinary skill to include progressive leveling when incorporating the game disclosed by Letovsky into another or the same game as a means of furthering the video game influence and appeal.

**Claims 62 and 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ellis (WO 02/32521 A1) in view of one of ordinary skill.**

24. Ellis describes the use of bonuses in the form of awards and games as a common method for attracting players to a play a game (pg. 1, par. 2, lines 9-12). However is silent about the disclosed game being a part of a bonus game. It would have been obvious to one of ordinary skill in gaming to include the game disclosed by Ellis into an existing casino game to further increase the appeal of the game machine.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian E. Rendón whose telephone number is 571-272-3117. The examiner can normally be reached on 9 - 5pm.

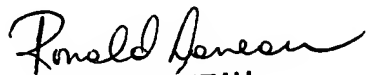
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert E. Pezzuto can be reached on 571-272-6996. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christian E Rendón  
Examiner  
Art Unit 3714

CER

  
RONALD LANEAU  
PRIMARY EXAMINER  
6/8/07